Yin (Irene) Lin

ireane@sjtu.edu.cn · SEIEE Buildings 3-328, SJTU · GitHub : https://github.com/nicelrene

Education

Shanghai Jiao Tong University (SJTU), Shanghai, China 2015 – Present

Bachelor in Computer Science, School of Electronic Information and Electrical Engineering. (CS)
GPA:3.84/4.3, 89.92/100
Core Courses:
• Operating Systems (96) • C++ Programming (96) • Project Workshop of Operating Systems (98) • Computer Networks (95) • Algorithm & complexity (90) • Artifical Intelligence (94) • Mechine learning (96) • Advanced Data Management (90)

University of Waterloo (UW), Canada 2018.7 – 2018.10

Summer Intern in Computer Science, Cheriton School of Computer Science.

GRE: Verbal - 157 Quantitative - 168 Analytical Writing - 4.0 **TOEFL:** 108 (Reading 28, Listening 30, Speaking 22, Writing 28)

Research Intersts

Data management, Distributed systems, Data mining

Publications

Y. Lin, X. Chen, X. Gao, B. Yao, G. Chen, "R^2-Tree: An Efficient Indexing Scheme for Data Center Network", International Conference on Database and Expert Systems Applications (DEXA) 2018
Y. Lin, X. Chen, X. Gao, P. Weng, G. Chen, "MetisRL: A Reinforcement Learning Approach for Dynamic Routing in Data Center Networks", (Under Review) IEEE International Conference on Computer Communications(INFOCOM), 2019

Research Experience

R2-Tree: Scalable Indexing Schemes for High Dimensional Data 2016/12-2017/12

Shanghai Jiao Tong University – PI: Prof. Xiaofeng Gao (SJTU)

- R2-Tree is a scalable data center indexing scheme for high dimensional data. It follows the two-layer indexing framework where we maintain a global index layer above the structured overlay. We use R-Tree to support both point and range query. Besides, the bloom filter is also realized to reduce the false positive in the querying process. The experiments are conducted in Amazon's EC2 platform.

MertisRL: Data Center Flow Scheduling Scheme 2017/12-2018/6

Shanghai Jiao Tong University – PI: Prof. Xiaofeng Gao (SJTU)

- MertisRL is a flow scheduling scheme which use Reinforcement learning (RL) to dynamically schedule the flows in data center network and balance the workload. A controller uses reinforcement learning algorithm to compute the optimal routing scheme in a global view, and utilizes SDN centralized control to implement the routing scheme to Fat-tree data center network topology.

Mining Software Repositories 2018/6-2018/9

University of Waterloo –PI: Prof. Meiyappan Nagappan (UW)

- We go through the demo and research track of ICSE 2014-2018 to investigate the usage of development tools. We labled the tools by their purpose, programming language, availability and so on, then build a website to make the tools more easily accessible for software developers.

- We conduct an A/B test to investigate how different mobile ads usage pattern could affect the user's feeling of mobile apps. This test rules out the influence of the other factors like the content of the apps.

Teaching Experience

Teaching Assistant for CS 499 *Mathematical Foundations of Computer Science*.

Skills

Programming Languages: C++ Java, Python, C, MATLAB, HTML/CSS/JS

Honors and Awards

Mathematical Contest In Modeling, Meritorious Winner (twice, top 10% worldwide) 2017,2018
Chun Tsung Scholar from Shanghai Jiao Tong University (60/2400, top 2.5% in SJTU) 2017
Huawei Scholarship (8/139, top 5.8% in CS department) 2017
Yitu Scholarship (4/139 top 2.9% in CS department) 2017
Outstanding members from Shanghai Jiao Tong University (roughly top 15% in SJTU) 2017
Academic Scholarship from Shanghai Jiao Tong University (roughly top 10% in SJTU) 2017
Cyrus Tang Scholarship (for outstanding volunteer work) 2017

Academic Services

The 11th International Conference on Combinatorial Optimization & Applications (COCOA), Shanghai, China,
Organization Staff and Emcee of Conference Banquet 2017/12/16-2017/12/18